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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,315	07/10/2003	Jim D. Kunce	406912	3579

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LEE & HAYES PLLC
SUITE 500
421 W RIVERSIDE
SPOKANE, WA 99201

EXAMINER	
BARAN, MARY C	

ART UNIT	PAPER NUMBER
2857	

DATE MAILED: 06/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/617,315	KUNCE, JIM D.	
	Examiner	Art Unit	
	Mary Kate B. Baran	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 April 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42,45 and 47-49* is/are rejected.

7)☒ Claim(s) *43,44 and 46* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *10 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. The action is responsive to the Amendment filed on 30 August 2005. Claims 1-34 are pending. Claims 4, 7, 13, 18 and 27 are amended. Claims 32-34 are new.

2. The amendments filed 30 August 2005 are sufficient to overcome the prior objection to the abstract, specification and claims.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 49 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 49 recites "a computer readable storage medium tangibly embodying program instructions" and is dependent on claim 35. However, claim 35 is a method claim, and it is not clear if Applicant is claim 49 is claiming a method or a storage medium.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Beller (U.S. Patent No. 5,852,819).

Referring to claim 1, Beller teaches a computer system user interface (see Beller, column 8 lines 3-11) for statistical analysis (see Beller, column 19 lines 25-38) comprising: a data entry display screen configured to receive user input providing tabular data (see Beller, column 8 lines 12-21); a configuration and control display screen configured to receive user input (see Beller, column 9 lines 3-20) selecting a particular statistical analysis to be performed on the tabular data (see Beller, column 21 lines 27-67); statistical computation means responsive to user input received in the configuration and control display screen to perform the particular statistical analysis using the tabular data entered by user input in the data entry display screen to generate statistical results (see Beller, column 19 lines 52-64) wherein the statistical computation means is operable to retrieve and reformat the tabular data without user interaction (see Beller, column 20 lines 4-21); and a results page display screen responsive to the statistical computation means and to user input received in the configuration and control display screen to format and display results of the statistical analysis (see Beller, column 20 lines 22-42).

Referring to claim 2, Beller teaches that the statistical computation means includes: means for computing the particular statistical analysis as one or more of mean

of the response, standard deviation of a function response (see Beller, column 21 lines 48-56), or percentiles of a function response (see Beller, column 21 lines 58-63).

Referring to claim 3, Beller teaches a data store associated with the data entry display screen for persistent storage of the tabular data (see Beller, Figure 6 "Block 601" and "Block 602"), wherein the statistical analysis computation means is operable to retrieve the tabular data from the data store (see Beller, Figure 6 "Block 603").

Referring to claims 4 and 18, Beller teaches receiving user input identifying desired analysis; retrieving user data from a data store (see Beller, column 10 lines 1-14); reformatting the user data from a data store (see Beller, Figure 6 "Block 603"); reformatting the user data in accordance with the desired analysis (see Beller, column 13 lines 49-63); computing factors for the desired analysis (see Beller, column 19 lines 52-64); formatting output from results of the computation for presentation to the user (see Beller, column 20 lines 4-21); and presenting the output to the user in response to input from the user requesting output presentation (see Beller, column 20 lines 29-42), wherein the steps of retrieving, reformatting computing and formatting are automated, responsive to the step of receiving and otherwise substantially devoid of interaction with the user for receiving input (see Beller, column 20 lines 22-29).

Referring to claims 5 and 19, Beller teaches receiving user input to enter the user data in a tabular format in advance of the step of receiving user input identifying desired analysis (see Beller, column 9 lines 11-20).

Referring to claims 6 and 20, Beller teaches transferring the user data entered in tabular format to a database (see Beller, column 16 lines 12-20).

Referring to claims 7 and 21, Beller teaches retrieving the user data from the database such that the user data is in a different format than the tabular format (see Beller, column 20 lines 4-21).

Referring to claims 8 and 22, Beller teaches receiving user input identifying the desired analysis as one or more of mean of the response, standard deviation of a function response (see Beller, column 21 lines 48-56), or percentiles of a function response (see Beller, column 21 lines 58-63).

Referring to claims 9 and 23, Beller teaches presenting a spreadsheet to a user on a display wherein the spreadsheet comprises a plurality of pre-defined pages (see Beller, column 19 lines 52-64); receiving tabular data in a canonical form into a data page of the plurality of pre-defined pages (see Beller, column 21 lines 27-47); receiving configuration input into a user interaction page of the plurality of pre-defined pages wherein the configuration input indicates a type of statistical analysis to be performed

and indication of elements involved in the statistical analysis (see Beller, column 16 lines 6-19); automatically reformatting the tabular data in accord with the type of statistical analysis without further user interaction (see Beller, column 20 lines 4-21); automatically performing the indicated statistical analysis for all indicated elements without further interaction wherein the statistical analysis identifies a significant factor in the tabular data (see Beller, column 19 lines 52-64); and generating results of the statistical analysis in a result page of the plurality of pre-defined pages wherein the results identify the significant factor (see Beller, column 20 lines 22-42).

Referring to claims 10 and 24, Beller teaches receiving user input identifying portions of the tabular data representing elements for the statistical analysis and user input identifying portions of the tabular data representing a response for the statistical analysis (see Beller, column 19 lines 52-64).

Referring to claims 11 and 25, Beller teaches receiving user input as the configuration input identifying the type of statistical analysis as one or more of mean of the response, standard deviation of a function response (see Beller, column 21 lines 48-56), or percentiles of a function response (see Beller, column 21 lines 58-63).

Referring to claims 12 and 26, Beller teaches generating results as tabular output in the results page (see Beller, column 27 line 66 – column 28 line 18).

Referring to claims 13 and 27, Beller teaches generating results as graphical output in the results page (see Beller, column 27 lines 3-26).

Referring to claims 14 and 28, Beller teaches receiving user input identifying relevant elements within the tabular data and a corresponding response within the tabular data (see Beller, Figure 6 "Block 603").

Referring to claims 15 and 29, Beller teaches determining a difference between the mean of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element (see Beller, column 29 lines 48-58).

Referring to claims 16 and 30, Beller teaches determining a difference between a standard deviation of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element (see Beller, column 29 lines 48-58).

Referring to claims 17 and 31, Beller teaches determining a difference between percentiles of a studied element of said relevant elements and all other elements of said relevant elements to determine significance of the studied element (see Beller, column 29 lines 48-58).

Referring to claims 32-34, Beller teaches that the computing of factors for the desired analysis comprises finding statistically significant factors affecting a given response within the user data (see Beller, column 21 lines 48-67).

Referring to claims 35 and 49, Beller teaches a method comprising: receiving data through a data entry display mechanism (see Beller, column 9 lines 3-20); receiving configuration input through a configuration and control display mechanism (see Beller, column 9 lines 3-20 and column 21 lines 27-67), wherein the configuration input indicates: a type of statistical analysis to be performed (see Beller, column 21 lines 48-58); and an indication of factor-type X elements and at least one response-type Y element associated with the received data (see Beller, column 22 lines 10-32); performing the indicated statistical analysis for all indicated elements, wherein the statistical analysis identifies a significant factor among the indicated factor-type X elements with respect to said at least one identified response-type Y element (see Beller, column 19 lines 52-64); and generating results of the statistical analysis, wherein the results identify the significant factor (see Beller, column 20 lines 22-42).

Referring to claim 36, Beller teaches that the receiving an indication of factor-type X elements and said at least one response-type Y elements comprising indicating respective types of the elements within a tabular display of the elements (see Beller, column 21 lines 48-67).

Referring to claim 37, Beller teaches receiving an instruction to identify a specified order of all effects (see Beller, column 21 lines 56-67).

Referring to claim 38, Beller teaches receiving an instruction to standardize an identified factor-type Y element by removing an effect of an identified factor-type X element on the identified response-type Y element (see Beller, column 21 lines 63-67).

Referring to claim 39, Beller teaches receiving an instruction to categorize an identified factor-type X element into a discrete range of values of the factor-type X element (see Beller, column 21 lines 56-67).

Referring to claim 40, Beller teaches identifying an X level associated with a desired level of interaction analysis for an identified factor-type X element (see Beller, column 21 lines 56-67).

Referring to claim 41, Beller teaches identifying a type of statistical measure response represented by an identified response-type Y element, the type of statistical measure response defining the type of statistical analysis to be performed (see Beller, column 21 lines 56-67).

Referring to claim 45, Beller teaches allowing a user to customize specifications that aid in determining which response-type X elements are significant as compared to other response-type Y elements (see Beller, column 9 lines 3-10).

Referring to claim 47, Beller teaches presenting the generated results in a tabular-type presentation, the tabular-type presentation showing main effects and higher-order effects (see Beller, column 9 lines 21-33 and column 27 line 66 – column 28 line 18).

Referring to claim 48, Beller teaches presenting the generated results in a graphical-type presentation, the graphical-type presentation showing main effects and higher-order effects (see Beller, column 9 lines 21-33 and column 27 lines 3-26).

Allowable Subject Matter

5. Claims 43, 44 and 46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

6. Applicant's arguments filed 30 August 2005 have been fully considered but they are not persuasive.

Applicant argues that Beller does not teach "a configuration and control display screen configured to receive user input selecting a particular statistical analysis to be performed on the tabular data." However, Applicant's arguments are not well taken. Beller teaches a user input device for inputting user control commands into a digital computer system (see Beller, column 9 lines 3-10), this includes a presentation device, such as a display, to facilitate the operation of the computer system (see Beller, column 9 lines 11-20). The user is permitted access to the data, information and algorithms stored in the computer (see Beller, column 10 lines 1-14). The user accessible data, information and algorithms stored on the computer may be used to perform statistical analysis on stored tabular data (see Beller, column 21 lines 27-67), such as data stored in an Excel spreadsheet (see Beller, column 20 lines 22-42). Therefore, using an input (i.e. keyboard, mouse, touch screen, etc) (see Beller, column 9 lines 3-10) and a display (see Beller, column 9 lines 11-20), a user may input data which commands the computer to perform statistical analysis on tabular data (see Beller, column 21 lines 27-67).

Applicant further argues that Beller does not teach "the statistical computation means is operable to retrieve and reformat the tabular data without user interaction." However, Applicant's arguments are not well taken. Beller teaches that the processor for computing statistical analysis retrieves the tabular data (i.e. data stored in the database) (see Beller, column 21 lines 48-67), and using the algorithms, formulas or functions therein, groups, filters, sorts (see Beller, column 21 lines 48-58), arranges and/or organizes the tabular data stored in the database (see Beller, column 22 lines

57-62). These actions are performed by the processor and save the user from having to enter the database and arrange the data manually.

Applicant further argues that Beller does not teach "computing factors for the desired analysis." However, Applicant's arguments are not well taken. As stated above, Beller teaches that user selected data is used to select a desired command which then allows the processor to perform mathematical or statistical analysis on the data using the formulas or functions provided (see Beller, column 19 lines 25-38 and lines 52-64).

Applicant further argues that Beller does not teach, "wherein the steps of retrieving, reformatting, computing and formatting are automated, responsive to the step of receiving and otherwise substantially devoid of interaction with the user for the receiving input." However, Applicant's arguments are not well taken. As stated previously, a user enters commands to the processor, and as a result of these commands the processor in turn performs the user selected analysis on the data (see Beller, column 19 lines 52-64). The user's function is merely to select the commands and the retrieving, reformatting, computing and formatting are fully automated within the processor.

Applicant further argues that Beller does not teach that the "configuration input indicates a type of statistical analysis to be performed and indication of elements involved in the statistical analysis." However, Applicant's arguments are not well taken. Beller teaches that, using a spreadsheet, formulas may be generated which specify

specific cells (i.e. elements) for use in calculation (i.e. statistical analysis) (see Beller, column 20 line 50 – column 21 line 26).

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary Kate B. Baran whose telephone number is (571) 272-2211. The examiner can normally be reached on Monday - Friday from 9:00 am to 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571) 272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

29 May 2006

HAL WACHSMAN
PRIMARY EXAMINER
AU 2857